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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,186	09/12/2003	Mark Keenan	001-225	2185
29569	7590	02/07/2006	EXAMINER	
JEFFREY FURR 253 N. MAIN STREET JOHNSTOWN, OH 43031			AHLUWALIA, NAVNEET K	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/605,186	KEENAN ET AL.	
	Examiner	Art Unit	
	Navneet K. Ahluwalia	2166	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The application has been examined. Claims 1 – 15 are pending in this office action.

#### ***Oath/Declaration***

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The digital signature for inventor Nathan Huebner is signed by Anthony Mirante in the Declaration as well as the power of attorney/ authorization of agent.

#### ***Drawings***

3. The drawings are objected to because Figures 1, 2, 4 – 6 are not clear for examination or understanding the invention. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as

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either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

### ***Specification***

5. The disclosure is objected to because of the following informalities:

In paragraph 0048 line 9 heuristic is misspelled as 'heuristinc'.

Appropriate correction is required.

### ***Claim Objections***

6. Claim 11 is objected to because of the following informalities:

In claim 11 line 3 heuristic is misspelled as 'heuristinc'. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1 – 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In Claim 1 the preamble states “a first group of constraints; ???????” which is not explained in the specification.

In Claim 11 the preamble states “search using one or more of a set of sampling, heuristic, genetic or other non-deterministic algorithm” not explained in the specification.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1 – 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1 the preamble states “a first group of constraints; ???????” which is not understood as to how this would be a part of the system.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1 – 10, 12 – 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Krupin et al. ('Krupin' herein after) (US 6,751,611 B2).

With respect to claim 1,

Krupin discloses a system performing a search query (Figure 4, Krupin) comprising:

- having user choose a first group of constraints (column 6 lines 31 – 39, Krupin); ???????
- having the user choose additional constraints (column 6 lines 39 – 50, Krupin);
- searching based on the first group of constraints (column 6 lines 52 – 57, Krupin);
- reviewing results of said search (column 9 lines 58 – 63, Krupin);
- determining whether or not to search using said additional constraints (column 7 lines 3 – 9, Krupin);

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- having if it is determined searching based on additional constraints (column 7 lines 24 – 39, Krupin); and
- providing the results of said search (column 11 lines 1 – 9, Krupin).

With respect to claim 2,

Krupin discloses a system according to claim 1 in which includes having said user access the system using the Internet (column 5 lines 42 – 54, Krupin).

With respect to claim 3,

Krupin discloses a system according to claim 1 in which includes having said user access the system through a client-server relationship (column 5 lines 42 – 54, Krupin).

With respect to claim 4,

Krupin discloses a system according to claim 1 in which includes having said user enter constraint using an entry means (Figure 4, column 2 lines 19 – 24, Krupin).

With respect to claim 5,

Krupin discloses a system according to claim 4 in which having said entry means is entering text (Figure 4, column 2 lines 19 – 24, Krupin).

With respect to claim 6,

Krupin discloses a system according to claim 4 in which having said entry means is a dialog box (Figure 4, column 2 lines 19 – 24, Krupin).

With respect to claim 7,

Krupin discloses a system according to claim 4 in which having said entry means is a pick list (Figure 4, column 2 lines 25 – 42, Krupin).

With respect to claim 8,

Krupin discloses a system according to claim 4 in which having said entry means is radio buttons (Figure 4, column 2 lines 25 – 42, Krupin).

With respect to claim 9,

Krupin discloses a system according to claim 1 in which includes having said system search using all said first constraints and additional constraints (column 9 lines 1 – 5 and 58 – 63, Krupin).

With respect to claim 10,

Krupin discloses a system according to claim 1 in which includes having said system search using subsets of said constraints, keeping intermediate results and checking the remaining constraints if needed (column 11 lines 10 – 21 and 34 – 45, Krupin).



With respect to claim 12,

Krupin discloses a system according to claim 1 in which includes relaxing, tightening or modifying the constraints before reporting said results (column 2 lines 34 – 40, Krupin).

With respect to claim 13,

Krupin discloses a system according to claim 1 in which includes using new constraints (column 2 lines 40 – 44, Krupin).

With respect to claim 14,

Krupin discloses a system according to claim 13 in which includes display said new constraints (Figures 5, 6, 7 and column 11 lines 5 – 20, Krupin).

With respect to claim 15,

Krupin discloses a system according to claim 1 in which includes returning the number of solutions for each subset of constraints (Figure 5, Krupin).

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krupin et al. ('Krupin' herein after) (US 6,751,611 B2) as applied to claims 1 – 10 and 12 - 15 above, and further in view of Fox et al. ('Fox' herein after) (US 2003/0069873 A1).

With respect to claim 11,

Krupin discloses a system according to claim 1 in which includes having said system search using one or more of a set of sampling, heuristic, genetic or other non-deterministic algorithm (column 11 lines 10 - 21).

Krupin however does not explicitly disclose the algorithm being one of sampling, heuristic, genetic or other non-deterministic algorithm.

Fox teaches the use of sampling, heuristic, genetic or other non-deterministic algorithms (page 4 paragraph 0045 lines 10 – 15, Fox).

It would have been obvious to one of ordinary skill in the art of data processing at the time of the present invention to combine the teachings of cited references because

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the use of sampling, genetic, heuristic and non-deterministic algorithm of Fox's system would allow users to build and tailor a query as they further define the topic of interest, moving from a generic search to specific topic areas through query inputs (page 2 paragraph 0016 lines 6 – 10, Fox). Furthermore the use of algorithms would increase the system precision, affecting the number of documents that are retrieved as relevant (page 2 paragraph 0016 lines 10 – 14, Fox).


**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet K. Ahluwalia whose telephone number is 571-272-5636. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam T. Hosain can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dated: 02/01/2006

  
**MOHAMMAD ALI**  
**PRIMARY EXAMINER**

Navneet K. Ahluwalia  
Examiner  
Art Unit 2166